

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/768,253	SUEMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Justin P. Misleh	2622	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Justin P. Misleh. (3) John R. Sanders.  
 (2) Michael R. Cammarata. (4) \_\_\_\_\_.

Date of Interview: 02 March 2007.

Type: a) Telephonic b) Video Conference  
 c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1, 9, 15, and 21.

Identification of prior art discussed: N/A.

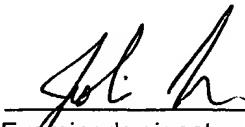
Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: A tentative agreement was reached that the proposed claims (see attached sheets) are allowable over the prior art of record -- an updated search will be performed.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
John R. Sanders 3/2/07  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### **Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record**

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### **Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews**

#### **Paragraph (b)**

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### **37 CFR §1.2 Business to be transacted in writing.**

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**AMENDMENTS TO THE CLAIMS**

PROPOSED

*Please amend the claims as follows:*

1. (CURRENTLY AMENDED) A digital camera comprising:
  - (a) a housing provided with a plurality of lens groups movable along an optical axis in accordance with an instructed magnification;
  - (b) an image sensor disposed for receiving light through the lens groups and producing an electronic information in accordance therewith;
  - (c) a non-volatile memory connected to the image sensor for receiving and storing data in accordance with the electronic information received from the image sensor; and
  - (d) a controller electronically controlling the non-volatile memory and movement of the lens groups, the controller having program logic defining a plurality of operation modes, the logic upon power initiation determining an operation mode, and if the mode is determined to be an image recording mode, the logic causing the controller to commence moving the lens groups to initialization positions and perform initialization processing for enabling image recording, and after completion of the initialization processing for enabling image processing, upon receipt of a command for photographing generated by a shutter being pressed during a movement of the lens group to the initialization positions, control the non-volatile memory to store data in accordance with the electronic information presently available from the image sensor before-prior to

the lens group have arrived at completed the movement to the initialization positions.

2. (CURRENTLY AMENDED) The digital camera according to claim 1, wherein the program logic causes the controller to initialize the image sensor and the non-volatile memory for image recording.

3. (ORIGINAL) The digital camera according to claim 2, further comprising a display device controlled by the controller, the program logic upon initialization, initializing the display device for displaying information.

4. (PREVIOUSLY PRESENTED) The digital camera according to claim 3, wherein the display device is a display or an LED.

5. (PREVIOUSLY PRESENTED) The digital camera according to claim 1, wherein the lens groups comprise a zoom lens group which moves in accordance with an instructed magnification and a focus lens group for focusing, the controller controlling the focus lens group to follow movement of the zoom lens group to an initialization position.

PROPOSED

6. (PREVIOUSLY PRESENTED) The digital camera according to claim 5, further comprising a detector in electronic communication with the controller, the detector detecting a movement amount of the zoom lens group, and the controller controlling movement of the focus lens group in accordance with the movement amount detected by said detector.

7. (PREVIOUSLY PRESENTED) The digital camera according to claim 6, wherein the detector is formed by a cord plate and a terminal.

8. (PREVIOUSLY PRESENTED) The digital camera according to claim 6, wherein the detector detects step movement, each step corresponding to a movement range of the zoom lens group from a retracted position to the initialization position divided into a substantially equal number of intervals, with step movement information being provided to the controller for movement of the focus lens group in accordance therewith.

9. (CURRENTLY AMENDED) A method for activating a digital camera having a plurality of lens groups which move in accordance with an instructed magnification, and an image sensing system disposed for receiving an image from the lens groups and producing an electronic information representing the image, the method comprising:

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- (a) determining an operation mode upon power initiation; and
- (b) if the operation mode is an image recording mode, then:
  - (i) initializing the image sensing system for receiving the image from the lens groups and producing the electronic information representing the image;
  - (ii) moving the lens groups to initialization positions; and
  - (iii) after completion of initializing the image sensing system, upon receipt of a command for photographing generated by a shutter being pressed during the movements of the lens groups to the initialization positions, recording an producing the electronic information representing the image presently available from the image sensing system prior to the lens groups arriving at having completed their movements to the initialization positions for recording the electronic information representing the image into a non-volatile memory.

10: (CANCELED)

11. (PREVIOUSLY PRESENTED) The method of claim 9, wherein recording the electronic information representing the image includes displaying the image in accordance with the electronic information on a display device.

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12. (PREVIOUSLY PRESENTED) The method of claim 9, wherein the lens groups comprise a zoom lens group which moves in accordance with the instructed magnification and a focus lens group for focusing, wherein moving the lens groups to the initialization positions include moving the focus lens group to follow movement of the zoom lens group during the movement of the zoom lens group to the initialization position.

13. (PREVIOUSLY PRESENTED) The method of claim 12, wherein moving the focus lens group to follow the movement of the zoom lens group includes detecting a movement amount of the zoom lens group using a detector.

14. (PREVIOUSLY PRESENTED) The method of claim 13, wherein detecting the movement amount includes:

dividing a range of the zoom lens group into a plurality of steps, said range being from a retracted position to the initialization position, and storing movement amounts of the focus lens group corresponding to respective steps; and

reading the movement amounts of the focus lens group corresponding to the step detected by the detector and moving the focus lens group.

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15. (CURRENTLY AMENDED) A method for use in a digital camera having a plurality of lens groups movable in accordance with an instructed magnification, and an image sensing system disposed for receiving an image from the lens groups and producing an electronic information representing the image, the method comprising:

- (a) determining if an operation mode has changed; and
- (b) if the operation mode has changed to an image recording mode, then:
  - (i) initializing the image sensing system for receiving the image from the lens groups and producing the electronic information representing the image;
  - (ii) moving the lens groups to initialization positions; and
  - (iii) after completion of initializing the image sensing system, upon receipt of a command for photographing generated by a shutter being pressed during the movements of the lens groups to the initialization positions, recording an producing the electronic information representing the image presently available from the image sensing system prior to the lens groups arriving at having completed their movements to the initialization positions for recording the electronic information representing the image into a non-volatile memory.

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16. (CURRENTLY AMENDED) The method of claim 15, wherein the camera includes a memory and initializing the image sensing system includes initializing the non-volatile memory for storing data in accordance with the electronic information from the image sensing system.

17. (PREVIOUSLY PRESENTED) The method of claim 16, wherein the camera includes a display device, and wherein recording electronic information representing the image includes enabling display of the image in accordance with the electronic information from the image sensing system.

18. (PREVIOUSLY PRESENTED) The method of claim 15, wherein the lens groups include a zoom lens group which moves in accordance with the instructed magnification and a focus lens group

which moves to follow the movement of the zoom lens group during the movement of the zoom lens group to the initialization positions.

19. (PREVIOUSLY PRESENTED) The method of claim 18, wherein moving the focus lens group to follow movement of the zoom lens group includes detecting a movement amount of the zoom lens group using a detector.

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20. (PREVIOUSLY PRESENTED) The method of claim 19 wherein detecting the movement amount of the zoom lens group includes:

dividing a range of said zoom lens group into a plurality of steps, said range being from a retracted position to the initialization position, and storing movement amounts of the focus lens group corresponding to respective steps; and

reading the movement amounts of the focus lens group corresponding to the step detected by the detector and moving the focus lens group.

21. (PREVIOUSLY PRESENTED) A camera, comprising:  
a plurality of lens groups;  
an image sensor for sensing an image from light received through the plurality of lens groups; and  
a controller for controlling movements of the plurality of lens groups, for controlling the image sensor, and for controlling a storage of the image data into a non-volatile memory accessible by the camera,  
wherein when the controller receives instructions for photographing generated by a shutter being pressed during a movement of the plurality of lens groups from a first predetermined position to a second predetermined lens position, the controller controls the image sensor to sense the image prior to the plurality of lens groups have completed their movements to the second

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predetermined lens position for recording the image data into the non-volatile memory.

22. (PREVIOUSLY PRESENTED) The camera of claim 21, wherein the first predetermined position of the plurality of lens groups is one of a tele position and a wide position and the second predetermined position of the plurality of lens groups is the other of the tele position and the wide position.

23. (PREVIOUSLY PRESENTED) The camera of claim 21, wherein the controller controls the plurality of lens groups such that the image is focused during the movement between the first and second predetermined positions.

24. (PREVIOUSLY PRESENTED) The camera of claim 21, further comprising a display, wherein the image is displayed on the display during the movement between the first and second predetermined positions.

25. (PREVIOUSLY PRESENTED) The camera of claim 21, wherein the plurality of lens groups include:

a zoom lens; and  
a focus lens,

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wherein the controller controls a movement of the zoom lens to control an image magnification and the controller controls the movement of the focus lens to control image focus.

26. (PREVIOUSLY PRESENTED) The camera of claim 25, wherein the zoom lens has a plurality of magnification ranges, the zoom lens goes through the plurality of magnification ranges during the movement of the plurality of lens groups between a retracted position and the first predetermined position, and

upon camera power up, the controller controls the movement of the plurality of lens groups between the retracted and the first predetermined positions.

27. (PREVIOUSLY PRESENTED) The camera of claim 26, wherein the first predetermined position of the plurality of lens groups is one of a tele position and a wide position and the second predetermined position of the plurality of lens groups is the other of the tele position and the wide position.

28. (CURRENTLY AMENDED) A method for controlling a camera, comprising:

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moving a plurality of lens groups from a first predetermined position to a second predetermined position;

determining if an instruction to record an image by a shutter being pressed is received ~~before~~during the movement of the plurality of lens groups from the first predetermined position to the second predetermined position ~~is completed~~; and

sensing the image prior to the plurality of lens groups have completed the movement to the second predetermined position and storing the image to a non-volatile memory accessible by the camera before the movement of the plurality of lens groups from the first predetermined position to the second predetermined position is completed when it is determined that the instruction for photographing generated by ~~a~~the shutter being pressed is received.

29. (PREVIOUSLY PRESENTED) The method of claim 28, wherein the first predetermined position of the plurality of lens groups is one of a tele position and a wide position and the second predetermined position of the plurality of lens groups is the other of the tele position and the wide position.

30. (PREVIOUSLY PRESENTED) The method of claim 28, wherein further comprising maintaining a focus of the image during the movement of

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the plurality of lens group between the first and second predetermined positions.

31. (PREVIOUSLY PRESENTED) The method of claim 28, further comprising displaying the image on a display during the movement of the plurality of lens group between the first and second predetermined positions.

32. (PREVIOUSLY PRESENTED) The method of claim 28, wherein the plurality of lens groups include a zoom lens and a focus lens, the method further comprising:

controlling a movement of the zoom lens to control an image magnification; and

controlling the movement of the focus lens to control image focus.

33. (PREVIOUSLY PRESENTED) The method of claim 32, wherein the zoom lens has a plurality of magnification ranges and the zoom lens goes through the plurality of magnification ranges during the movement of the plurality of lens groups between a retracted position and the first predetermined position, the method further comprising controlling the movement of the plurality of lens groups between the retracted and the first predetermined positions upon camera power up.

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34. (PREVIOUSLY PRESENTED) The method of claim 33, wherein the first predetermined position of the plurality of lens groups is one of a tele position and a wide position and the second predetermined position of the plurality of lens groups is the other of the tele position and the wide position.

35-37. (CANCELED)

38. (PREVIOUSLY PRESENTED) The digital camera of claim 1, wherein the receipt of the command for image recording occurs when a shutter button of the digital image camera is fully depressed to start a photographing operation.

39. (PREVIOUSLY PRESENTED) The method of claim 9, wherein the receipt of the command for image recording occurs when a shutter button of the digital image camera is fully depressed to start a photographing operation.

40. (PREVIOUSLY PRESENTED) The method of claim 15, wherein the receipt of the command for image recording occurs when a shutter button of the digital image camera is fully depressed to start a photographing operation.

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41. (PREVIOUSLY PRESENTED) The camera of claim 21, wherein the controller receives the instructions to record the image when a shutter button of the camera is fully depressed to start a photographing operation.

42. (PREVIOUSLY PRESENTED) The method of claim 28, wherein the receipt of the instructions to record the image occurs when a shutter button of the camera is fully depressed to start a photographing operation.

43. (PREVIOUSLY PRESENTED) The camera of claim 21, wherein the first predetermined position is the position of the plurality of lens groups when the digital camera is turned off and the second predetermined position is the initialization position when the camera is turned on.

44. (PREVIOUSLY PRESENTED) The method of claim 28, wherein the first predetermined position is the position of the plurality of lens groups when the digital camera is turned off and the second predetermined position is the initialization position when the camera is turned on.

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